

REMARKS/ARGUMENTS

The non-final Office Action of March 1, 2007, has been carefully reviewed and these remarks are responsive thereto. Claims 1, 2, 5, 7, 9, 10, 12, 14, 15, and 17 have been amended, claims 19-22 have been added, and claims 13, 16, and 18 have been canceled without prejudice or disclaimer. No new matter has been introduced. Claims 1-12, 14-15, 17, and 19-22 are now pending in this application. Reconsideration and allowance of the instant application are respectfully requested.

Preliminarily, applicant wishes to thank Examiner Mariam for the courtesies extended to Mr. Brisnehan during the telephonic interview on June 8, 2007. The following remarks include applicant's report of the substance of interview pursuant to MPEP § 713.04. Regarding claim 12, applicant has added the phrase "to be reconciled" at the end of the phrase "return the results . . . application" to address the matter discussed during the interview and referred to in the Interview Summary. Applicant's representative recalls this language being satisfactory to the Examiner. If however, the language is not satisfactory, the Examiner is invited to contact the undersigned at the number below.

Rejections Under 35 U.S.C. § 101

Claims 12-14 stand rejected under 35 U.S.C. § 101, as being directed to non-statutory subject matter. While the Applicant does not necessarily agree with the rejection and do not concede that it was proper, claims 12 and 14 have been amended and now recite a computer readable media storing computer-executable components that perform a method of analyzing electronic ink. Applicant notes the amendment directed to clarify the section 101 issue with respect to claim 12 (and also claim 15) is slightly different from the amendment attached to the Interview Summary. However, after further consideration applicant realized that it would be more preferred to refer the elements recited in claim 12 as computer-executable components rather than the elements of the computer-readable media. In any event, applicant submits that claims 12 and 14 are clearly statutory. Additionally, as noted above, claim 13 has been canceled without prejudice or disclaimer. Therefore, applicant request withdrawal of the rejection under 35 U.S.C. § 101.

Rejections Under 35 U.S.C. § 112

Claims 1-11 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Office Action alleges on page 2 that the feature of “returning control of the first processing thread to the software application” is unclear. While the Applicant does not necessarily agree that this feature is unclear, claims 1 and 2 have been amended as proposed in the interview and no longer recite “returning control of the first processing thread to the software application.” Therefore, the rejection under 35 U.S.C. § 112 is rendered moot.

Claims 15-18 stand rejected under 35 U.S.C. § 112, second paragraph, as lacking antecedent basis for the term “software operating environment.” Applicant thanks the Examiner for pointing out this error and have amended claims 15 and 17 to depend from claim 12.

Rejections Under 35 U.S.C. § 102

Claims 1, 7-8, and 11-12, stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,799,315 (Rainey). Applicant respectfully traverses this rejection for at least the following reasons.

Preliminarily and as discussed during the interview, Applicant notes that Rainey does not disclose processing threads as recited in independent claims 1 and 12. The Office Action on pages 3-4 alleges that Figure 2 of Rainey teaches first and second processing threads by disclosing an ‘Event Tagger’ software component 160 and a separate ‘Event Detector’ software component 190. However, as is well known in the art, a software component is an entirely separate concept from a processing thread, in that a single processing thread can and often does execute multiple different software components. The term “thread” does not appear anywhere in Rainey’s disclosure, and the Applicant has been unable to identify any comparable concept taught or suggested by Rainey. Thus, although Rainey describes multiple software components (e.g., in Figure 2, components 160-195), it does not teach first and second processing threads as recited in independent claims 1 and 12. Accordingly, claims 1 and 12, along with their respective dependent claims, are not anticipated by Rainey.

Additionally, Applicant has amended claim 1 to recite analyzing an electronic ink document using “a first data object corresponding to a first state” of the document, and then, after receiving the results of the analysis of the electronic ink document, “receiving from the

software application a second data object corresponding to a second state of the document,” and “reconciling the results of the analysis process with the second data object.” In contrast, Rainey discloses a technique for “event-tagging” a document by creating and storing new tags as data is input into the document. (Rainey, col. 3, lines 38-61) Rainey does not disclose or have any need for a “first data object” and a “second data object,” because Rainey’s tagging operations are executed in series. Thus, the state of the document in Rainey never changes during the tagging process. Accordingly, for this additional reason, Applicant submits, as agreed during the interview, that independent claim 1 is not anticipated by Rainey. Claims 7, 8, and 11 depend from claim 1 and are not anticipated by Rainey for at least the same reasons, as well as based on the additional features recited therein.

Independent claim 12 has been amended to recite a first processing thread maintaining an electronic ink document, and a second processing thread executing an ink analysis process, “wherein the first processing thread and second processing thread operate asynchronously such that the software application continues to operate while the ink analysis process analyzes the document data corresponding to the electronic ink data.” As discussed above, Rainey does not teach or suggest first and second processing threads. Thus, Rainey also fails to disclose two threads executing “asynchronously,” and is unequipped to support a scenario in which, “the software application continues to operate while the ink analysis process analyzes the document data,” as recited in claim 12. In contrast, in Rainey, an event is detected, tagged, and stored before any new state change can occur within the document. (See Rainey, FIG. 3; col. 3, lines 38-61) Thus, Rainey does not disclose, teach or suggest wherein a “first processing thread and [a] second processing thread operate asynchronously such that the software application continues to operate while the ink analysis process analyzes the document data,” as recited in amended claim 12. Accordingly, claim 12 is not anticipated by Rainey for this additional reason.

Rejections Under 35 U.S.C. § 103

Claims 1-4, 6-7, and 9-18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,106,905 (Simske). Applicant respectfully traverses this rejection for at least the following reasons.

Preliminarily, Applicant notes that like Rainey and as discussed during the interview, Simske also fails to disclose, teach or suggest processing threads as recited in independent claims 1 and 12. Figure 1 of Simske discloses software components 106-114 in a memory 104. However, Simske never mentions the term “thread” and does not describe any comparable concept. Thus, although Simske describes executing multiple software components, it does not teach or suggest first and second processing threads as recited in independent claims 1 and 12. Further, Applicant notes that Simske is primarily concerned with techniques for reducing the processing time for optical character recognition (OCR) applications. (Simske, col. 1, lines 48-57) This concern makes it clear that Simske’s OCR processing executes in series with the document, and is thus performed in the same processing thread as the application maintaining the document. Accordingly, claims 1 and 12, along with their respective dependent claims are not obvious over Simske.

Additionally, as noted above, Applicant has amended claim 1 to recite analyzing an electronic ink document using “a first data object corresponding to a first state” of the document, and then, after receiving the results of the analysis of the electronic ink document, “receiving from the software application a second data object corresponding to a second state of the document,” and “reconciling the results of the analysis process with the second data object.” Simske describes techniques for OCR processing of electronic ink documents, but, like Rainey, Simske does not disclose a technique in which an electronic ink document changes, for example, by adding new characters or annotations, during the OCR processing. Thus, Simske does not teach or suggest a “first data object” and a “second data object,” nor would it have use for these multiple data objects. Therefore, for this additional reason, Applicant submits that independent claim 1 is not obvious over Simske. Claims 2-4, 6-7, and 9-11 depend from claim 1 and are not obvious over Simske for at least the same reasons, as well as based on the additional features recited therein.

For example, claim 6 recites a “recognition process with a first stage for recognizing electronic ink data designated to be in a first language and a second stage for recognizing electronic ink data designated to be in a second language.” The Office Action alleges on page 7 that Simske discloses performing character recognition using a first “non-native” language and a second “native” language, even though Simske never mentions the term “non-native.” Simske discloses that a native dictionary for OCR processing may “support any language.” (Simske, col. 6, lines 39-43) However, Simske does not teach or suggest a first stage corresponding to a first

language and a second stage corresponding to a second language, as recited in claim 6. Thus, Applicant submits that claim 6 is allowable for this additional reason.

As discussed above, independent claim 12 has been amended to recite a first processing thread maintaining an electronic ink document, and a second processing thread executing an ink analysis process, “wherein the first processing thread and second processing thread operate asynchronously such that the software application continues to operate while the ink analysis process analyzes the document data corresponding to the electronic ink data.” As noted above and during the interview, Simske also does not teach or suggest first and second processing threads. Thus, Simske also fails to disclose two threads executing “asynchronously,” and is unequipped to support a scenario in which, “the software application continues to operate while the ink analysis process analyzes the document data,” as recited in claim 12. Accordingly, amended claim 12 is not obvious over Simske. Claims 14-15, 17, and 19 depend from claim 12, and are not obvious over Simske for at least the same reasons, as well as based on the additional features recited therein.

New Claims

Applicant has added new claims 19-22 to clarify and more fully claim their invention. For example, claim 19 depends from claim 1 and further recites, “wherein the reconciling comprises determining based on the first data object and the second data object that the state of the document changed during the analyzing by the electronic ink analysis process.” New claim 21 also depends from claim 1, and further recites, “wherein reconciling comprises updating the second data object based on the results of the analysis process, and returning the updated second data object to the software application.” Since neither Rainey nor Simske teaches or suggests the additional features of new claims 19-22, Applicant submits that these new claims are further allowable over the cited references.

CONCLUSION

Based on the foregoing, Applicant respectfully submits that the application is in condition for allowance and a Notice to that effect is earnestly solicited. Should the Examiner believe that anything further is desirable in order to place the application in even better form for allowance, the Examiner is invited to contact Applicant's undersigned representative at the below-listed number.

Respectfully submitted,
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